

The invention is a mixer/flow conditioner wherein the orientation of the passages are such that an initial flow stream passing is divided into a plurality of packets with each packet being given a velocity component such that angular momenta of the packets exiting the passages sums to approximately zero thereby achieving a final flow stream having a swirl number less than 0.2 and possibly as low as 0.03. The invention has particular application in mixing and/or flow conditioning where a recirculation zone is not desired.